ANSWER 1 OF 5 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 1

ACCESSION NUMBER: 2002:19997 CABA
DOCUMENT NUMBER: 20013012236
TITLE: Low density lipoprotein (LDL) subfractions during pregnancy: accumulation of buoyant LDL with advancing gestation
AUTHOR: Winkler, K.; Wetzka, B.; Hoffmann, M. M.; Friedrich, I.; Kinner, M.; Baumstark, M. W.; **Wieland, H.**; Marz, W.; Zahradnik, H. P.
CORPORATE SOURCE: Department of Clinical Chemistry, Albert Ludwigs University School of Medicine, Hugstetter Strasse 55, D-79106 Freiburg, Germany.
SOURCE: Journal of Clinical Endocrinology and Metabolism, (2000) Vol. 85, No. 12, pp. 4543-4550. 60 ref.
Publisher: Endocrine Society. Bethesda
ISSN: 0021-972X
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20020207
Last Updated on STN: 20020207

AB Pregnancy is accompanied by changes in the maternal lipoprotein metabolism that may serve to satisfy the nutritional demands of the fetus. In this study lipoprotein metabolism was investigated in 23 women during normal pregnancy in the first, second, and third trimesters and in 15 healthy nonpregnant women with regular menstrual cycles. Lipid and apolipoprotein concentrations were measured in total plasma, very low density, intermediate density, low density (LDL), and high density lipoproteins, and in each of six LDL subfractions. During early pregnancy, **triglycerides**, and dense LDL were higher than in the nonpregnant state. With advancing gestation, **triglycerides** increased and the distribution of apolipoprotein B-100-containing lipoproteins became increasingly dominated by the accumulation of very low density and intermediate density lipoproteins and buoyant, **triglyceride**-rich LDL. This is the first study that investigates LDL subfractions in pregnancy using a method that strictly **separates** LDL subfractions by virtue of density. The accumulation of buoyant, **triglyceride**-rich lipoproteins may be related to the down-regulation of maternal lipase activities by placental hormones. As a consequence, the metabolic changes of late pregnancy may result in an increased flux of lipoprotein-derived lipids to the placenta, which, with advancing gestation, increasingly expresses receptors with a high affinity for **triglyceride**-rich lipoproteins.

L4 ANSWER 2 OF 5 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 1998328361 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9665424
TITLE: Fluorometric determination of total retinyl esters in **triglyceride**-rich lipoproteins.
AUTHOR: Orth M; Hanisch M; Kroning G; Porsch-Ozcurumez M; **Wieland H**; Luley C
CORPORATE SOURCE: Institut fur Klinische Chemie, Klinikum der Otto-von-Guericke-Universitat, Magdeburg, Germany.. matthias.orth@medizin.uni-magdeburg.de
SOURCE: Clinical chemistry, (1998 Jul) 44 (7) 1459-65.
Journal code: 9421549. ISSN: 0009-9147.
PUB. COUNTRY: United States
DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199807
ENTRY DATE: Entered STN: 19980731
Last Updated on STN: 19980731

Entered Medline: 19980723

AB A time-consuming sample preparation and measuring procedure is required for the quantitation of retinyl palmitate by HPLC. We developed a fluorometric method for the determination of total retinyl esters in chylomicrons, chylomicron remnants, and VLDL. This method is precise, sensitive, rapid, simple, and particularly useful for large-scale studies of postprandial lipid metabolism. Because the turbidity of postprandial lipemic samples interferes with the fluorescence measurement, all samples were incubated for 10 min with a clearing buffer containing esterase and detergents. This buffer eliminates the turbidity and hydrolyzes all retinyl esters to retinol. The fluorescence signal (excitation wavelength, 330 nm; emission wavelength, 490 nm) was linear from 0.1 mg/L up to 4 mg/L retinyl palmitate, and the CVs were 3.6% within-run and 5.1% within-series. A first application studied postprandial lipoproteins, which were first **separated** by ultracentrifugation and then subjected to size exclusion chromatography. Fluorescence analysis revealed that the chylomicron density fraction contains large amounts of chylomicron remnants.

L4 ANSWER 3 OF 5 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 3

ACCESSION NUMBER: 96:50235 CABA
DOCUMENT NUMBER: 19961401935
TITLE: Determination of **triglycerides** in lipoproteins **separated** by agarose gel electrophoresis
AUTHOR: Winkler, K.; Nauck, M.; Siekmeier, R.; Marz, W.; **Wieland, H.**
CORPORATE SOURCE: Department of Medicine, Division of Clinical Chemistry, Albert Ludwigs-University, Hugstetter Strasse 55, 79106 Freiburg, Germany.
SOURCE: Journal of Lipid Research, (1995) Vol. 36, No. 8, pp. 1839-1847. 29 ref.
ISSN: 0022-2275
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 19960430
Last Updated on STN: 19960430

AB A simple method for the quantitation of **triglycerides** in electrophoretically **separated** lipoproteins by specific enzymatic staining was developed. After electrophoresis, glycerol is liberated from **triglycerides** by the action of cholesterol esterase. Glycerol is oxidized by a sequence of enzymatic reactions. Due to the presence of triphosphate isomerase and glyceraldehyde-3-phosphate dehydrogenase in the reaction mixture, 2 moles of the precipitating dye dormazane are generated per mole glycerol. The relative amounts of [alpha], pre-[beta] and [beta] lipoproteins are estimated by densitometric scanning at 570 nm. Absolute **triglyceride** concentrations of the respective lipoprotein fractions are calculated from total **triglycerides**. When tested with purified VLDLs the electrophoresis assay was linear between 0.08 and 6.5 g/litre pre-[beta] lipoprotein **triglycerides**. The intra-assay and inter-assay coefficients of variation were between 5.2 and 9.8%,and between 3.2 and 12.9%, respectively. Comparison of the electrophoresis method with a combined ultracentrifugation/precipitation method in 172 sera resulted in the following correlation coefficients: [alpha] lipoprotein vs. HDL **triglycerides**, r = 0.847; pre-[beta] lipoprotein vs. VLDL **triglycerides**, r = 0.989; [beta] lipoprotein vs. LDL **triglycerides**, r = 0.815. This method is easy to perform, and is a precise and accurate technique for the estimation of lipoprotein **triglycerides**. It is the first reliable method that allows the direct quantification of LDL **triglycerides** without ultracentrifugation.

L4 ANSWER 4 OF 5 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 4

ACCESSION NUMBER: 81:77307 CABA

DOCUMENT NUMBER: 19801412266
TITLE: Serum lipoproteins and coronary artery disease (CAD). Comparison of the lipoprotein profile with the results of coronary angiography
AUTHOR: **Wieland, H.**; Seidel, D.; Wiegand, V.; Kreuzer, H.
CORPORATE SOURCE: Abt. klinische Chemie und Kardiologie, Medizinische Universitatsklinik, Robert-Koch-Str. 40, D-3400 Gottingen, German Federal Republic.
SOURCE: Atherosclerosis, (1980) Vol. 36, No. 3, pp. 427-439. 15 ref.
ISSN: 0021-9150
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 19941101
Last Updated on STN: 19941101

AB The presence or absence of coronary artery disease was established by coronary angiography in 181 male patients 40 to 60 years old. The concentrations of cholesterol and **triglycerides** were estimated in the serum of all patients. In addition plasma lipoproteins were estimated by recently developed quantitative lipoprotein electrophoresis based on densitometric scanning of lipoprotein bands visualized by polyanion precipitation after electrophoretic **separation**. The most pronounced differences between the 2 groups of patients were in the concentrations of whole serum cholesterol, beta -lipoprotein cholesterol and the beta -lipoprotein: alpha -lipoprotein ratio. There was little difference in the concentrations of serum **triglycerides**, pre-beta -lipoprotein cholesterol and alpha -lipoprotein cholesterol. A combination of critical values for the concentrations of serum cholesterol and beta -lipoprotein cholesterol and for the beta -lipoprotein: alpha -lipoprotein ratio could be established. If exceeding at least 2 of the 3 criteria was used as cut-off-point between the 2 groups of patients, a maximum differentiation of 50% could be achieved (81% correctly classified patients against 31% incorrectly classified). Introduction of the beta -lipoprotein: alpha -lipoprotein ratio as criterion improved the range of differentiation and increased differentiation by about 10%. That effect cannot be achieved by using alpha -lipoprotein cholesterol as criterion.

L4 ANSWER 5 OF 5 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 5
ACCESSION NUMBER: 81:76668 CABA
DOCUMENT NUMBER: 19801411459
TITLE: Serum lipoproteins and coronary artery disease (CAD). Comparison of the lipoprotein profile with the results of coronary angiography
AUTHOR: **Wieland, H.**; Seidel, D.; Wiegand, V.; Kreuzer, H.
CORPORATE SOURCE: Dep. Clinical Chemistry, Medical University Clinic, Robert Koch Str. 40, D-3400 Gottingen, German Federal Republic.
SOURCE: Atherosclerosis, (1980) Vol. 36, No. 2, pp. 269-280. 15 ref.
ISSN: 0021-9150
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 19941101
Last Updated on STN: 19941101

AB The presence or absence of coronary artery disease was established by coronary angiography in 181 men 40 to 60 years old. The concentrations of cholesterol and **triglycerides** were estimated in the serum of all patients. In addition, plasma lipoproteins were estimated by recently developed quantitative lipoprotein electrophoresis based on densitometric scanning of lipoprotein bands visualized by polyanion precipitation after electrophoretic **separation**. The greatest differences between those 2 groups of patients were in the concentrations of whole serum

cholesterol, beta -lipoprotein cholesterol and the beta -lipoprotein: alpha -lipoprotein ratio. No great difference was seen in the concentrations of serum **triglycerides**, pre- beta -lipoprotein cholesterol or alpha -lipoprotein cholesterol. A combination of critical values for the concentrations of serum cholesterol and beta -lipoprotein cholesterol and for the beta -lipoprotein: alpha -lipoprotein ratio could be established. If exceeding at least 2 of the 3 critical values was used as the cut-off point between the 2 groups of patients, a maximum differentiation of 50% could be achieved (81% correctly classified patients against 31% incorrectly classified). Introduction of the beta -lipoprotein: alpha -lipoprotein ratio as criterion shifts the range of differentiation favourably, increasing it by about 10%. That effect cannot be achieved by regarding the alpha -lipoprotein cholesterol value as criterion.

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=> d hist

     (FILE 'HOME' ENTERED AT 09:47:44 ON 15 JUL 2004)

     FILE 'CABA, BIOSIS, CAPLUS, MEDLINE, EMBASE' ENTERED AT 09:48:13 ON 15
     JUL 2004
                E WIELAND, H/AU
                E WIELANDH/AU
                E WIELAND H/AU
L1           807 E3-E8
L2           157 L1 AND TRIGLYCERIDE?
L3            14 L2 AND SEPARAT?
L4             5 DUP REM L3 (9 DUPLICATES REMOVED)

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ANSWER 3 OF 3 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2

ACCESSION NUMBER: 1997:314417 BIOSIS
DOCUMENT NUMBER: PREV199799604905
TITLE: Evaluation of two homogeneous methods for measuring high-density lipoprotein cholesterol.
AUTHOR(S): Huang, Yi-Chang; Kao, Jau-Tsuen; Tsai, Keh-Sung [Reprint author]
CORPORATE SOURCE: Dep. Lab. Med., Coll. Med., National Taiwan Univ. Hosp., National Taiwan Univ., 7 Chung-Shan South Rd., 10016 Taipei, Taiwan
SOURCE: Clinical Chemistry, (1997) Vol. 43, No. 6 PART 1, pp. 1048-1055.
CODEN: CLCHAU. ISSN: 0009-9147.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Jul 1997
Last Updated on STN: 4 Sep 1997

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(FILE 'HOME' ENTERED AT 07:26:16 ON 15 JUL 2004)

FILE 'CABA, BIOSIS, CAPLUS, MEDLINE, EMBASE' ENTERED AT 07:26:33 ON 15 JUL 2004

L1 224049 TRIGLYCERID?
L2 133543 (LOW (W) DENSITY (W) LIPROTEIN?) OR LDL
L3 42672 L1 AND L2
L4 639681 (POP/POE) OR COPOLYMER OR POLYOXYPROPYLENE OR POLYOXYETHYLENE
L5 0 LIPASE AND CLYCEROKINASE AND (GLYCEROL (W) PHOSPHATE (W) DEHYDR
L6 212 SULPHA? AND CYCLODEXTRIN
L7 2425 DEXTRAN AND SULPHA?
L8 5123 GLYCYLGLYCINE
L9 0 L3 AND L6 AND L7 AND L8
L10 46292 ?CYCLODEXTRIN
L11 40 L3 AND L10
L12 2352240 SEPARAT?
L13 1469237 ?POLYMER OR (PROPYLENE OXIDE) OR (ETHYLENE OXIDE)
L14 4 L11 AND L12 AND L13
L15 8 L3 AND (L4 OR L13) AND L10
L16 3 DUP REM L15 (5 DUPLICATES REMOVED)

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